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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,111	11/13/2001	Nicolae G. Cotanis	5929.0016-01	6450

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
1300 I STREET, NW  
WASHINGTON, DC 20005

EXAMINER

CRAVER, CHARLES R

ART UNIT PAPER NUMBER

2682

DATE MAILED: 07/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/987,111

Applicant(s)

COTANIS, NICOLAE G.

Examiner

Charles R Craver

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-27,30,31 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,22-26,30 and 33 is/are rejected.
- 7) ☒ Claim(s) 21,27 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20, 24-26, 30 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin et al, US PG PUB 2002/0115447.

**Claim 20:** Martin discloses a signal coverage determination method comprising

Receiving signal strength for a signal, receiving location information for a first location and determining a local means for that location (user, paragraph 0030), estimating a second location based on the first and calculating a route based on the two locations and calculating a signal coverage for the route therein (paragraphs 0191-0195). **Claims 24-26:** Martin discloses latitude and longitude (paragraph 0030) and dividing the route with different directions (paragraphs 0191-0195).

**Claims 30 and 33** are the inherent physical form of the method of claim 20, and as such are rejected for the same reasons set forth above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin.

**Claim 22:** while disclosing applicant's invention of claim 20 above, Martin fails to disclose the use of a standard deviation. However, such was notoriously well-known in the art at the time of the invention in signal strength measurement, and as such the examiner takes Official Notice of such a feature, asserting that one of ordinary skill in the art would have found its use obvious as it is a standard mathematical step. **Claim 23:** standard deviations operate on a difference value from a local mean.

***Allowable Subject Matter***

Claims 21, 27 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 21 and 31 teach towards a signal coverage determination method and system comprising receiving signal strength for a signal, receiving location information

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for a first location and determining a local means for that location, estimating a second location based on the first and calculating a route based on the two locations and calculating a signal coverage for the route therein, further including calculating the coverage by the equation  $R_{cp} = (\sum[k]C_p(k)\Delta(k))/(\sum[k]\Delta(k))$ .

Claim 27 teaches towards a signal coverage determination method comprising receiving signal strength for a signal, receiving location information for a first location and determining a local means for that location (user, paragraph 0030), estimating a second location based on the first and calculating a route based on the two locations and calculating a signal coverage for the route therein, further wherein determining the coverage by the equation  $C_p(r) = 1/2 - \text{erf}(W(t) - LM(r))/(o(lm))$ .

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dowling, Somoza, Hyziak, Vanden Heuvel, Schwengler, Branch and Mills disclose location means.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

(703) 872-9314 for both formal and informal/draft communications, labeled as such.

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Hand delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington VA, sixth floor (receptionist).

Any inquiry concerning this or earlier communications from the examiner should be directed to examiner Charles Craver at (703) 305-3965.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached at (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-4700.

CC

C.Craver

June 28, 2004

*CC 6/28/04*  
**CHARLES CRAVER**  
**PATENT EXAMINER**